LIST OF CONTENTS

NUMBER 1

F. Naveau, J. P. Busnel, D. Durand et C. M. Bruneau	1	Réseaux polyuréthanne synthétisés en milieu dilué: caractérisation des polyols propoxylés précurseurs et mesure du taux de liaisons intramoléculaires
P. Steer et F. Rietsch	7	Viscoplasticité du polycarbonate aux vitesses de sollicitations élevées
Nikolaos A. Peppas and Kent G. Urdahl	13	Anomalous penetrant transport in glassy polymers—VIII. Solvent-induced cracking in polystyrene
Chantal Catusse, Rachid El Gharbi et Antoine Gaset	21	Synthèse des thiocyanates et des isocyanates en présence de cellulose greffée
A. K. Kulshreshtha, B. P. Singh and Y. N. Sharma	29	Viscometric determination of compatibility in PVC/ABS polyblends—I. Viscosity–composition plots
A. K. Kulshreshtha, B. P. Singh and Y. N. Sharma	33	Viscometric determination of compatibility in PVC/ABS polyblends—II. Reduced viscosity–concentration plots
N. A. Weir, K. Whiting, J. Arct and G. McCulloch	37	Thermal degradation of poly(*o*-acetylstyrene)
Albert Jan De Groot, Jan Jager and Jan B. F. N. Engberts	45	Neutral hydrolysis of 1-benzoyl-3-phenyl-1,2,4-triazole in the presence of copolymers of maleic acid with alkyl vinyl ethers. The effect of hydrophobic microdomains
Nadir Beldjoudi, Abdelaziz Bouazizi, Driss Douibi and Albert Gourdenne	49	Microwave curing of epoxy resins with diaminodiphenylmethane—II. Crosslinking under continuous or pulsed waves
Nadir Beldjoudi and Albert Gourdenne	53	Microwave curing of epoxy resins with diaminodiphenylmethane—III. Pulse frequency dependence in pulsed irradiation
Eva Prokopová, Jan Biroš, František Lednický and Lars-Olof Sundelöf	61	Ordered structures in aqueous poly(vinyl alcohol) gels
Jadwiga Ostrowska-Czubenko and Barbara Ostrowska-Gumkowska	65	Ionic interactions in sulphonated poly(ethylene terephthalate)—I. Far-infrared studies
Yoshio Utena, Hirofumi Yajima, Tadahiro Ishii and Takashi Handa	71	Excimer emission in protonated pyridine systems—5. Molecular weight dependence of dimer-like excimer and normal excimer fluorescence of poly(2-vinylpyridine) in solution in the presence of trifluoroacetic acid
A. Valenza, F. P. La Mantia and D. Acierno	81	Shear and elongational rheology of linear low density polyethylenes with different structures
Johannis Simitzis	87	Correlation between the production parameters of unsaturated polyesters with the aim to control the polyesterification process
J. P. Agrawal	93	Prediction of gel time and exotherm peak temperature of unsaturated polyester and chloropolyester blends

Short Communication
Gastone Paiaro, Luciano Pandolfo, Vincenzo Busico and Paolo Corradini 99 Physico-chemical and structural characterization of a series of nylons

Announcements i

NUMBER 2

Roberto Napolitano, Beniamino Pirozzi and Angela Tuzi 103 Conformational energy calculations on the crystalline state of mesogenic polyesters

S. Djekhaba, C. Graillat et J. Guillot 109 Copolymérisation en émulsion acrylate d'éthyle–styrène—1. Étude cinétique en réacteur fermé (batch)

L. Ould-Kaddour et Cl. Strazielle 117 Étude par diffusion de la lumière du système ternaire polystyrène–polyvinylméthylether–solvant

R. Vuković, G. Bogdanić, V. Kurešević, Frank E. Karasz and William J. MacKnight 123 Miscibility and phase behaviour in poly(2,6-dimethyl-1,4-phenylene oxide) and poly(fluorostyrene-co-bromostyrene) blends

T. Sato, M. Oka, H. Tanaka and T. Ota 129 Postpolymerization and block copolymerization by using long-lived poly(*N*-methylmethacrylamide) radicals

M. C. Sacchi, I. Tritto and P. Locatelli 137 The function of amines in conventional and supported Ziegler–Natta catalysts

K. Hummel, E. Hubmann and T. Pongratz 141 Reaction of a partially brominated alternating butadiene–propene copolymer with 1,6-bis(bromomagnesium) hexane: evidence of crosslinks by metathesis degradation

Ruth Dunsing and Hans R. Kricheldorf 145 Polylactones—14. Polymerization of δ-valerolactone and ϵ-caprolactone by means of trimethylsilyl triflate

S. Varbanov, N. Peeva, S. Stoeva, E. Nedkov and G. Borisov 151 Reduction of the flammability of polypropylene by tertiary phosphine oxides containing halogenated phenoxy groups

Ryszard T. Sikorski and Grażyna Mirkiewicz 157 Studies on reactivity of polymers—IV. Reactivity of polystyrene in an ionic reaction with sulphuryl chloride

J. Baselga, M. A. Llorente, J. L. Nieto, I. Hernández-Fuentes and I. F. Piérola 161 Polyacrylamide networks. Sequence distribution of crosslinker

N. B. Valiotti, S. A. Nenakhov and G. E. Zaikov 167 The influence of deformation temperature under uniaxial stretching on the parameters of heat shrinkage of high density polyethylene

I. Iliopoulos and R. Audebert 171 Polymer complexes stabilized through hydrogen bonds. Influence of "structure defects" on complex formation: potentiometric study

Stanisław Rabiej and Andrzej Włochowicz 177 Ladder-type copolymers—I. Investigation of the molecular structure

Stanisław Rabiej and Andrzej Włochowicz 183 Ladder-type copolymers—II. Thermal investigations

Short Communications

K. Behari, J. C. Bevington, S. W. Breuer and T. N. Huckerby 187 The reactions with initiating radicals of monomers having low ceiling temperatures: the case of alpha-methoxy styrene with 2-cyano-2-propyl radical

A. K. Kulshreshtha, B. P. Singh and Y. N. Sharma 191 Viscometric determination of compatibility in PVC/ABS polyblends. Part III. Choice of a common solvent and its effect on results

NUMBER 3

Jung-Il Jin, Kyung-Sun Min and Y. W. Park 195 Synthesis and electroconductivity of 7,7,8,8-tetracyanoquinodimethane salts of a new polycation polymer and its monomeric model compound derived from 1,4-bis[β-pyridyl-(4)-vinyl] benzene

Josef Thevissen, Liselotte Klein, Bernhard Dederichs and Ernst Klesper 201 Tactic poly(methacrylic acid hydrazides)

K. S. Devaky and V. N. Rajasekharan Pillai 209 Selective conversion of chloromethyl and bromomethyl groups to aminomethyl groups in multifunctional crosslinked polystyrenes

A. Dimian, G. Villoutreix et R. Berlot 215 Relations entre la morphologie et le comportement de polymères semi-cristallins

Cr. Simionescu, I. Mazilu, I. Cocîrlă, Lucia Tătaru and Tatiana Lixandru 221 Ferrocene polymers as polymerization initiators—IV. Polymerization of some *p*-substituted chloroformylated vinylic monomers

D. Harran, M. F. Grenier-Loustalot et Ph. Monge 225 Avancement de la réaction chimique au point de gel d'une résine epoxyde: systèmes (digylcidyl ether du bisphénol A–diamino diphényl méthane et diglycidyl ether du bisphénol A–diamino diphényl sulfone)

A. Gozlan, I. Bernstein and A. Zilkha 231 Electrochemical polymerization of dicarboxylic acids—VII. Polymerization of oligomers

Malcolm B. Huglin and Khalid S. Khairou 239 Copolymerisations of *N*-vinyl pyrrolidone with styrene and *n*-butyl acrylate

M. Chater and M. J. M. Vergnaud 245 Study of the process of cure of epoxide resin heated by liquid oil at constant temperature

Marc J. M. Abadie, Abdelbaki Djebaili, Michel Cadene et Michel Rolland 251 Effets des conditions de synthèse sur la conductivité électrique du polyacétylène dopé

P. R. Srinivasan, V. Mahadevan and M. Srinivasan 255 Poly(maleimide-amine)s and poly(maleimide-amine)ethers

J. L. Grossiord and G. Couarraze 259 Study of high molecular mass distributions of polymeric liquids by means of an analysis of some rheological properties. Applications to narrow distributions

Nadir Beldjoudi and Albert Gourdenne 265 Microwave curing of epoxy resins with diaminodiphenylmethane—IV. Average electrical power and pulse length dependence in pulsed irradiation

Jayalakshmit Gopal and M. Srinivasan 271 Synthesis of polyazohydrazides

Pushpa Bajaj and M. Surya Kumari	275	Structural investigations on hydrolyzed acrylonitrile terpolymers
R. M. Hassan, M. H. Wahdan and Ahmed Hassan	281	Kinetics and mechanism of sol–gel transformation on polyelectrolytes of nickel alginate ionotropic membranes
P. Bahadur and N. V. Sastry	285	Dilute solution behaviour of styrene–ethylene oxide block copolymers in aqueous solutions
V. Dobrescu, C. Andrei and G. Andrei	289	The antioxidizing effect of sterically hindered amines in thermal oxidation of low density polyethylene
Corrigenda	295	
Announcement	I	

NUMBER 4

V. Petraccone, C. De Rosa, A. Tuzi, R. Fusco and L. Oliva	297	Up/down ordering phenomena in crystalline isotactic polystyrene as a function of thermal treatment
G. Rizzo and G. Spadaro	303	Mechanical properties of low density polyethylene–isotactic polypropylene blends—I. Effect of mixing time
Sylvie Boileau, Françoise Méchin, Krzysztof Sienicki and Mitchell A. Winnik	307	Cyclization of poly(bisphenol A-diethylene glycol carbonate)—intramolecular pyrene excimer formation
Pierre Schaetzel et Bernard Auclair	313	Étude d'un échangeur d'ions carboxylique: propriétés à l'équilibre
Marc J. M. Abadie et S. M. Boukli-Hacene	319	Étude cinétique de la polymérisation de l'acétylène: optimisation de la production de polyacétylène
F. Gallego, M. E. Muñoz, J. J. Peña and A. Santamaría	327	Dynamic viscoelastic measurements of PVC gels
Mark G. Styring, Hoon Hong Teo, Colin Price and Colin Booth	333	Aqueous size-exclusion chromatography of anionic polyelectrolytes using porous glass packing
Kasinath Nayak	341	A quantum mechanical mo study of the effect of doping on the electronic band structure of a benzodiimidazole polymer
Geta David, M. Grigoras and C. I. Simionescu	347	Copolymerization of 2-substituted 2-oxazolines with some electron acceptors
A. Sánchez, C. Marco, J. G. Fatou and A. Bello	355	Thermal properties and morphology of poly(trimethylene sulphide)
H. Sivriev, V. Kaleva, G. Borissov, L. Zabski and Z. Jedlinski	365	Rigid polyurethane foams with reduced flammability, modified with phosphorus- and nitrogen-containing polyol, obtained from tetrakis(hydroxymethyl)phosphonium chloride
E. T. Kang, T. C. Tan and K. G. Neoh	371	Electrochemical characterization of chemically synthesized polypyrrole–halogen complexes
V. N. Tsvetkov and I. P. Kolomiets	379	Elastic deformations of liquid-crystalline polymers and their monomers in magnetic and electric fields

A. Mahammad Ibrahim, V. Mahadevan and M. Srinivasan — 385 Synthesis of phosphorus-containing alternating copolymers

N. K. Kalfoglou, D. D. Sotiropoulou and A. G. Margaritis — 389 Thermal and morphology characterization of blends of poly(ethylene oxide) with poly(vinyl acetate)

Short Communications

G. Gordon Cameron, Malcolm D. Ingram, Brian Munro and Elaine Ross — 395 A spin-probe study of liquid polymer electrolytes

M. T. Thorat, R. B. Mane, M. H. Jagdale, M. M. Salunkhe and P. P. Wadgaonkar — 399 Synthesis of triaryl cyanurates using polymer-supported reagents

Announcement — i

NUMBER 5

Masamitsu Shirai, Mitsuru Kuwahara and Makoto Tanaka — 403 Synthesis and alkali cation binding properties of photodimerizable polymers with differently sized crown ethers

G. L. Kann and S. Smith — 411 Copolymers of 3-chloropentafluoropropylene with fluoro-olefins

Jane E. Baxter, R. Stephen Davidson and Hendrik J. Hageman — 419 Acylphosphine oxides as photoinitiators for acrylate and unsaturated polyester resins

Roy S. Lehrle and Adrian Shortland — 425 A study of the purification of methyl methacrylate suggests that the "thermal" polymerisation of this monomer is initiated by adventitious peroxides

E. Pérez, A. Bello and J. G. Fatou — 431 Chain dimensions of poly(3,3′-dimethyl oxetane)

Norman S. Allen, Fernando Catalina, Jean Luc-Gardette, W. A. Green, Peter N. Green, W. Chen and Kenneth O. Fatinikun — 435 Spectroscopic properties and photopolymerisation activity of 4-*n*-propoxythioxanthone

H. Kubota, K. Kobayashi, J. F. Ding and Y. Ogiwara — 441 Triphenylamine-sensitized photografting of methacrylic acid on low-density polyethylene film

R. Centore, C. De Rosa, G. Guerra, V. Petraccone, P. Corradini and V. Villani — 445 Melting and solid phase transitions of isothermally crystallized copolymers of tetrafluoroethylene and hexafluoropropylene

M. Mouzali, J. Lacoste et M. Abadie — 449 Synthèse d'un polyisoprène à fort taux de microstructure, 1,4-*cis*

Jolanta Maślińska-Solich and Irena Rudnicka — 453 Optically active polymers—I. Copolymerization of *β*-pinene with maleic anhydride

N. Theophilou, D. Boils, A. Munardi, R. Aznar, J. Sledz, F. Schué, M. Galtier and A. Montaner — 457 Mechanism of doping and morphology of lightly *p*-doped *cis*-polyacetylene film with lanthanum nitrate

V. Bertini, M. Pocci, A. De Munno, N. Picci and F. Lucchesini — 467 Synthesis of tailor-made copolymers containing 1,4-benzodioxane systems for pH controlled selective flocculation of mineral dispersions

Yanda Jin and Robert Y. M. Huang — 471 Synthesis and transport properties of poly(vinyl alcohol) acrylonitrile/2-hydroxyethyl methacrylate membranes—I. Synthesis of poly(vinyl alcohol) acrylonitrile 2-hydroxyethyl methacrylate graft copolymer

I. Devedjiev, V. Ganev and G. Borissov — 475 Phosphorylation of poly(vinyl chloride) and polychloroprene rubber with salts of hypophosphorous acid

N. Oltchik, S. Freireich and A. Zilkha — 479 Aliphatic polyisocyanurate-urethanes for paper coatings

X. Z. Kong, C. Pichot and J. Guillot — 485 Kinetics of emulsion copolymerization of vinyl acetate with butyl acrylate

Teresa García López de Sa, José L. Allende Riaño and Luis M. Garrido — 493 Conformational transition of polyvinylpyrrolidone in aqueous solutions of sodium dodecyl sulphate

Short Communications

H. Haberkorn, W. Heckmann, G. Köhler, H. Naarmann, J. Schlag, P. Simak, N. Theophilou and R. Voelkel — 497 Unexpected properties of poly(acetylene) caused by a modified catalyst system and chemical modification

A. V. Pantar, R. V. Bahulekar, S. Ponrathnam and N. R. Ayyangar — 501 The polymerization of acrylamide on poly(ethylene glycol) template

Announcement — i

NUMBER 6

John C. Bevington — I *European Polymer Journal*: a brief history

Heikki Tenhu, Jutta Nuortila-Jokinen and Franciska Sundholm — 505 Photocrosslinking of partially cinnamoylated poly(vinyl alcohol)/poly(vinyl acetate) copolymer in aqueous solution

M. Provazník, R. Puffr and J. Šebenda — 511 Dielectric properties of lactams and their significance in the polymerization process

C. I. Simionescu, A. A. Popa, E. Comăniță, M. Păstrăvanu and S. Dumitriu — 515 Kinetics of methyl methacrylate polymerization initiated with phenylazoformamidoethyl 4-t-butylazo-4-cyanovalerate

Yves Baziard, Sylvie Breton, Serge Toutain and Albert Gourdenne — 521 Dielectric properties of aluminium powder–epoxy resin composites

Jacques Guillet, Bennaceur Cherqaoui et Jean-François May — 527 Comportements rhéologique et viscoélastique à l'état fondu du polyfluorure de vinylidène chargé de titanate de baryum

M. Bacquet, D. Lemaguer and C. Caze — 533 Porous texture and bromine distribution in porous styrene–bromostyrene–divinylbenzene terpolymers

B. Boutevin, Y. Pietrasanta, L. Sarraf et H. Snoussi — 539 Propriétés comparées des télomères et polymères—1. Etude de l'influence de la longueur de la chaîne sur la température de transition vitreuse (T_g) de polyméthacrylates

J. R. Allan, G. M. Baillie, H. J. Bowley and D. L. Gerrard — 547 Spectral and magnetic properties of some chloro and bromo transition metal complexes of isonicotinamide and a study of their performance as colouring materials for poly(vinyl chloride)

Jane E. Baxter, R. Stephen Davidson and Hendrik J. Hageman — 551 Acylphosphine oxides as photoinitiators for a TiO_2 pigmented acrylic resin

Issa A. Katime, F. J. Juanes Garcia and P. M. Sasia — 557 Anomalous behaviour of PMMA in the (methyl isobutyl ketone)/methanol system

Issa A. Katime, M. B. Huglin and P. M. Sasia 561 Preferential and total sorption in the system PMMA/toluene + *n*-butyl chloride

V. N. Tsvetkov, L. N. Andreeva and A. P. Filippov 565 Electro-optics of thermotropic mesogenic polymers in solution and in bulk

P. Manaresi, A. Munari, F. Pilati and E. Marianucci 575 A general intrinsic viscosity–molecular weights relationship for polydisperse polymers

Yu. I. Puzin, G. V. Leplyanin, Yu. M. Shaul'skii and G. A. Tolstikov 579 Polymerization of vinyl monomers initiated by peroxide–geminal bis-sulphide systems

Andrzej Włochowicz and Stanisław Rabiej 585 Ladder-type copolymers—III. SAXS and WAXS investigations of the supermolecular structure

Short Communications

N. S. Allen, E. M. Howells, E. Lam, F. Catalina, P. N. Green, W. A. Green and W. Chen 591 Photopolymerisation and flash photolysis of a water soluble benzophenone photoinitiator: influence of tertiary amine

J. P. Monthéard, M. Camps and F. Rodriguez 595 Preparation of a functionalized copolymer: poly-[styrene-co-4-(2-hydroxyethyl)-α-methylstyrene]

G. C. Pandey and A. K. Kulshreshtha 599 The photophysical behaviour of blends of poly-(vinyl chloride) with the terpolymer of acrylonitrile, butadiene and styrene

A. Lebouc and J. C. Rabadeux 603 Synthesis and preparation of macromers and polymers with complexing properties for cations

NUMBER 7

Yun-Zhu Luo, N. Kausalya Reddy, Frank Heatley, Colin Booth, Elizabeth J. Goodwin and David Jackson 607 Gel permeation chromatography of oxyethylene/oxypropylene block copolymers

Donald R. Miller and Nikolaos A. Peppas 611 Diffusional effects during albumin adsorption on highly swollen poly(vinyl alcohol) hydrogels

D. J. Wilson and G. Riess 617 Photochemical stabilization of block copolymer micelles

Pierre Schaetzel et Bernard Auclair 623 Étude d'une membrane échangeuse d'ions faiblement acide. Comparaison entre les modèles de Spiegler homogène, hétérogène et de Stefan–Maxwell

Yves Baziard, Sylvie Breton, Serge Toutain and Albert Gourdenne 633 Dielectric properties of copper powder–epoxy resin composites

R. Mercier, X. Coqueret, A. Lablache-Combier and C. Loucheux 639 Photochemistry of polymeric systems—VIII. Photocrosslinking of polysiloxanes including cinnamic, furacrylic or α-cyano β-styrylacrylic ester groups: a comparative study

Thomas A. Wielema and Jan B. F. N. Engberts 647 An ESR spin label study of the dynamics of a zwitterionic polymer, a polyelectrolyte, poly(methacrylic acid) and poly(acrylic acid) in aqueous solution

Sania Akhtar 651 Morphology and properties of blends of high-density polyethylene with natural rubber

D. Damyanov, Iv. Ivanov and M. Velikova 657 Filling of polyethylene by inorganic filler compounds during polymerization on the catalyst system $TiCl_4$–$(C_2H_5)_2AlCl$–$(C_6H_5)_2Mg$

L. Minkova, M. Velikova and D. Damyanov 661 Structural investigations of nascent polyethylenes obtained on supported titanium and vanadium catalyst systems

D. Serrano et D. Harran 667 Étude rhéologique de la réticulation du système tétraglycidyldiaminodiphénylméthane–diaminodiphénylsulfone—I. Influence de la concentration

D. Serrano et D. Harran 675 Étude rhéologique de la réticulation du système tétraglycidyldiaminodiphénylméthane–diaminodiphénylsulfone—II. Influence de la température de traitement

Hasan J. Al-Sharbaty and Muhie Rasoul Hamoud 685 The effect of certain mineral salts on some physico-mechanical properties of natural rubber vulcanizates

U. K. Saroop, K. K. Sharma, Madhumita Saroop, K. K. Jain, Ashok Misra and S. N. Maiti 689 Grafting of poly(vinyl chloride) with methyl methacrylate—I. Synthesis and characterization

U. K. Saroop, K. K. Sharma, K. K. Jain, Ashok Misra and S. N. Maiti 693 Grafting of poly(vinyl chloride) with methyl methacrylate—II. Thermal and mechanical behaviour

Short Communications

P. Cairon, B. Labiad and D. Villemin 697 Synthesis of dithioesters with polymer-supported dithiocarboxylates

J. C. Bevington, D. A. Cywar, T. N. Huckerby, E. Senogles and D. A. Tirrell 699 A method for the determination of the relative reactivities of monomers towards the 1-phenylethyl radical

NUMBER 8

Akira Matsumoto, Syuichi Yonezawa and Masayoshi Oiwa 703 Gelation in the copolymerization of styrene with oligoglycol dimethacrylates

N. S. Allen, M. Edge, J. H. Appleyard, T. S. Jewitt, C. V. Horie and D. Francis 707 Acid-catalysed degradation of historic cellulose triacetate, cinematographic film: influence of various film parameters

X. Coqueret, A. Lablache-Combier and C. Loucheux 713 Functionalization of polysiloxanes by esterification of pendant glycidic groups: acetylation as a model reaction

Pierre Schaetzel et Bernard Auclair 719 Confrontation de l'équation de Nernst–Planck de diffusion–convection (dans le modèle homogène) avec les résultats expérimentaux obtenus sur plusieurs membranes échangeuses d'ions

A. Nganie, D. Derouet, A. Fernandez-Ⱡ et C. P. Pinazzi 723 Polymères porteurs de greffons peptidiques—Ib. Synthèse de styrène *para*-substitué par des greffons oligopeptide à extrémités amine primaire

Cuiming Yuan and Deyue Yan 729 Influence of termination and transfer on molecular weight distribution of polymer—10. Chain transfer to monomer and impurity

M. Nasir and G. K. Teh 733 The effects of various types of crosslinks on the physical properties of natural rubber

V. Vlachy — 737 Enthalpies of dilution of strong polyelectrolytes. An account for noncoulombic interactions

G. Borisov, V. Doseva and K. Todorov — 741 Synthesis of phosphorylated esters and oligoesters, prepared from unsaturated acids and glycols, and their use as flame retardants for rigid polyurethane foams

K. Ito and T. Aoyama — 747 Molecular weight–conversion curves in the diffusion-controlled free radical polymerization of styrene

R. O. Carter III, K. R. Carduner, C. A. Gierczak and H. van Oene — 751 Spectroscopic method for the determination of the compositions of ternary polymer blends

Hiroshi Tanaka and Fumie Kōrogi — 759 Effects of annealing and atactic fraction on structural properties of isotactic polypropylene

Hani Younes and Daniel Cohn — 765 Phase separation in poly(ethylene glycol)/poly(lactic acid) blends

Issa A. Katime and José R. Quintana — 775 Stereoassociation of poly(methyl methacrylate): a study by coupling size exclusion chromatography with light scattering

E. Papirer, H. Balard and A. Vidal — 783 Inverse gas chromatography: a valuable method for the surface characterization of fillers for polymers (glass fibres and silicas)

Jadwiga Matuszewska-Czerwik and Stefan Połowiński — 791 Template photopolymerization of methacrylic acid —I. Photopolymerization of methacrylic acid on polyethylene glycol in an aqueous system

Subhi Kemal Hassun — 795 Ultrasonic study of molecular association of aqueous solutions of poly(vinyl alcohol). A method to determine molecular weight

D. Radić, N. Hamidi and L. Gargallo — 799 Preferential adsorption of poly(alkylphenyl methacrylate)s in tetrahydrofuran/water

Barbara Ostrowska-Gumkowska and Jadwiga Ostrowska-Czubenko — 803 Ionic interactions in sulphonated poly(ethylene terephthalate)—II. Thermal studies

Short Communications

A. S. Brar, G. S. Kapur and S. K. Dubey — 807 Microstructure of copolymers of methyl methacrylate with ethyl methacrylate

A. Bazuaye, E. F. Okieimen and O. B. Said — 811 Studies on the graft copolymerization of acrylonitrile

NUMBER 9

C. A. Barson and D. R. Fenn — 815 Kinetic studies of the copolymerisation of styrene and fluoro-α-methylstyrenes

J. E. Baxter, R. S. Davidson, M. A. U. de Boer, H. J. Hageman and P. C. M. van Woerkom — 819 The use of Fourier transform infrared spectroscopy to determine the photoinitiating efficiencies of acylphosphine oxides

Francesco Paolo La Mantia and Antonino Valenza — 825 Rheological properties of immiscible blends of low density polyethylene with nylon-6

I. S. Dairanieh and S. M. Lahalih — 831 Novel polymeric drilling mud viscosifiers

Naoto Tsutsumi, Akiyoshi Tsuji, Chika Horie and Tsuyoshi Kiyotsukuri — 837 Preparation and properties of silicon-containing polyimides

P. Dournel, E. Randrianalimanana, A. Deffieux and M. Fontanille — 843 Synthesis and polymerization of lignin macromonomers—I. Anchoring of polymerizable groups on lignin model compounds

Cristofor I. Simionescu, Geta David and Mircea Grigoras — 849 Copolymerization of 2-substituted 2-oxazolines carrying donor and acceptor groups

J. Thevissen and E. Klesper — 855 Circular dichroism and exciton effect of syndiotactic methacrylic polymers with chiral diacyl hydrazide side chains—IV. Poly(methacrylic acid-N^{β}(L-histidyl) hydrazide)

Anton Šebenik and Uči Osredkar — 863 Investigation of urea–cinnamaldehyde resin

D. A. Roozemond, F. den Hond, J. B. J. Veldhuis, H. Strasdeit and W. L. Driessen — 867 Preferred uptake of Cu(II) and Cd(II) by novel pyrazole-functionalized chelating polymers

Yves Baziard and Albert Gourdenne — 873 Crosslinking under microwaves (2.45 GHz) of aluminium powder–epoxy resin composites—I. Electrical power dependence

Yves Baziard and Albert Gourdenne — 881 Crosslinking under microwaves (2.45 GHz) of aluminium powder–epoxy resin composites—II. Aluminium concentration dependence

Adbelaziz Bouazizi and Albert Gourdenne — 889 Interactions between carbon black–epoxy resin composites and continuous microwaves—I. Electrical power dependence of the rate of crosslinking of the epoxy matrix

I. F. Piérola, M. Cáceres, P. Cáceres, M. A. Castellanos and J. Nuñez — 895 Fluorescence studies of the polycomplexes formed by interaction of polyvinylpyridine with polyacids

I. N. Topchieva, A. I. Kuzaev and V. P. Zubov — 899 Modification of polyethylene glycol

J. Piglowski — 905 Untere kritische Entmischungstemperatur in den Systemen Polyvinylchlorid/Methacrylatpolymere

J. Rieumont, R. Vega, N. Davidenko and J. A. Paz — 909 Sensitivity analysis in retarded radical polymerization of vinyl acetate in the presence of furan compounds

Short Communication
G. S. Sur and J. E. Mark — 913 Grafting of polystyrene onto the cross-links in a siloxane elastomer

NUMBER 10

Masakatsu Kochi, Kumiko Ōguro and Itaru Mita — 917 Photoluminescence of solid aromatic polymers—I. Poly(*p*-xylylene)

S. H. Goh and S. Y. Lee — 923 Miscibility of bromobenzylated poly(2,6-dimethyl-1,4-phenylene oxide) with polystyrene

R. Y. M. Huang and Y. F. Xu — 927 Pervaporation separation of ethanol–water mixtures using grafted poly(acrylic acid)-Nylon 6 membranes

G. L. Marshall and S. J. Wilson — 933 Cured polyester–solvent interaction studies using ^{13}C-NMR spectroscopy

G. L. Marshall and S. J. Wilson — 939 The characterisation of styrene cross-linked polyester resins using swollen-state ^{13}C-NMR spectroscopy

B. D. Gupta, L. Jirackova-Audouin and J. Verdu 947 Spectrophotometric study of the photostabilization of PVC by a benzylidene malonate

B. Boutevin, Y. Pietrasanta, J. J. Robin et T. Pollet 953 Synthèse de copolymères par greffage du polystyrène sur le polychlorure de vinyle

M. Nasir, B. T. Poh and P. S. Ng 961 Effect of γ-mercaptopropyltrimethoxysilane coupling agent on t_{90}, tensile strength and tear strength of silica-filled NR, NBR and SBR vulcanizates

B. L. Rivas, H. A. Maturana, U. Angne, R. E. Catalán and I. M. Perich 967 Preparation and properties of resins with adsorption properties for heavy metal ions. Part 5

D. D. Kechajov and M. A. Natov 971 Determination and evaluation of the stability of heterophase polymer–polymeric disperse systems

M. Bölke, P. Hallpap, G. Heublein and C. Weiss 975 Solvent influence on cationic copolymerization—Part I. Derivation of a rule

M. Bölke, P. Hallpap, G. Heublein and C. Weiss 979 Solvent influence on cationic copolymerization—Part II. Model calculations of the solvent influence on the cationic copolymerization of ethene and isobutene

S. Lazcano, A. Bello, C. Marco and J. G. Fatou 985 Solution properties and random coil dimensions of poly(3,3′-dimethylthietane)

S. Lazcano, C. Marco, J. G. Fatou and A. Bello 991 Effect of molecular weight on the thermal transitions of poly(3,3-dimethylthietane)

Johannis Simitzis 999 A mathematical model for computer simulation of the production of unsaturated polyesters with catalysts

Short Communications

S. H. O. Egboh 1005 Chemical modification of polynorbornene: synthesis of ionomers

F. M. Gray 1009 Salt and polymer dehydration and the preparation of reproducible polymer electrolyte films

Vlado Tabacik and Marc J. M. Abadie 1013 Formation of *trans* and *cis* polycetylenes during Ziegler–Natta polymerization of acetylene

Eleanor S. Cockburn, R. Stephen Davidson, Susan A. Wilkinson and John Hamilton 1015 A mechanistic study of the photocrosslinking of poly(vinyl alcohol) films modified with pendant styryl pyridinium groups

Announcement I

NUMBER 11

A. Chapiro et Z. Mankowski 1019 Polymérisation du vinylimidazole en masse et en solution

Hironobu Fukuzaki, Masaru Yoshida, Masaharu Asano, Yoshikazu Aiba and Isao Kaetsu 1029 Direct copolymerization of L-lactic acid with δ-valerolactone in the absence of catalysts

Gao De-Yu, Masaru Yoshida, Masaharu Asano, Hironobu Fukuzaki and Isao Kaetsu 1037 Radiation-induced polymerization of acrylic and methacrylic esters of *N*-hydroxysuccinimide

S. H. O. Egboh and M. O. Fagbule 1041 Grafting of methyl vinyl ketone onto poly(*cis*-1,4-isoprene) initiated by benzoyl peroxide

A. G. Margaritis and N. K. Kalfoglou 1043 Compatibility of poly(vinyl chloride) with epoxidized polybutadiene

René Chasset, Gilbert Legeay, Jean-Charles Touraine et Bernard Arzur 1049 Fluoration du polyéthylène par plasma froid: mouillabilité, indice limite d'oxygène, coefficient de frottement

B. D. Sarwade, P. P. Wadgaonkar and S. S. Mahajan 1057 Synthesis and characterization of aromatic polyazomethines containing s-triazine rings in the main chain

Allan W. McLennaghan and Richard A. Pethrick 1063 Linear segmented polyurethane electrolytes—I. Morphology and physical properties

G. O. R. Alberda van Ekenstein and Y. Y. Tan 1073 A relatively fast calorimetric method for the determination of initial rate as exemplified by the free radical polymerization of methyl methacrylate in dimethylformamide

B. Pucci, E. Guy, F. Vial-Reveillon et A. A. Pavia 1077 Télomères et cotélomères d'intérêt biologique et biomedical—I. Etude de la télomerisation radicalaire de monomères type acryloylpeptides

B. Pucci, B. Ragonnet et A. A. Pavia 1087 Télomères et cotélomères d'intérêt biologique et biomedical—II. Synthese de télomères galactosylés fluorescents marqueurs potentiels des lectines membranaires

John A. Mikroyannidis 1093 New styrylpyridine-based polyesters and polyurethanes

E. Tashev, S. Shenkov, K. Troev, G. Borissov, L. Zabski and Z. Edlinski 1101 Phosphorus containing rigid polyurethane foams

G. O. Shonaike 1107 The effect of temperature on cold-rolled nylon-6

Short Communications

A. Akelah, A. Selim and H. El-Hamshary 1111 Synthesis of pyridine and quinoline derivatives of poly(methyl methacrylate): their uses as brominating agents

Prerna Shukla and A. K. Srivastava 1115 Radical polymerization of methyl methacrylate initiated by pyridine dicyanomethylide

NUMBER 12

L. Gargallo, E. Soto, L. H. Tagle and D. Radić 1119 Solution properties and chain flexibility of poly(thiocarbonate) from 1,1-bis(4-hydroxyphenyl)-phenyl ethane

J. Thanuja and M. Srinivasan 1123 Direct synthesis of aromatic–aliphatic polyamides by phosphorylation

Aktar N. Bibi, David A. Boscott, Taswar Butt and Roy S. Lehrle 1127 Improving the adhesion between rubber and nylon by either epoxidation of the rubber or chemical pre-treatment of the nylon

Qin Qin Zhu, Hans Schupp and Wolfram Schnabel 1133 The kinetics of the photo-rearrangement of pendant α-phenyl-*o*-nitrobenzyl ester groups in copolymers. Polymer and solvent effects

X. Coqueret, A. Lablache-Combier and C. Loucheux 1137 Functionalization of polysiloxanes by esterification of pendant glycidic groups: catalyzed reaction in *N,N*-dimethylformamide

X. W. He, J. M. Widmaier, J. E. Herz and G. C. Meyer	1145	Competition between polycondensation of α,ω-dihydroxy polydimethylsiloxane and its condensation with alkoxy silane: a kinetic approach
J. R. Allan, G. M. Baillie, H. J. Bowley and D. L. Gerrard	1149	The spectral and magnetic properties of some chloro and thiocyanato transition metal complexes of the aminopyridines and a study of their performance as colouring materials for poly(vinyl chloride)
M. Camps, J. P. Monthéard, J. F. Delzant, G. Boiteux et G. Seytre	1155	Préparation, caracterisations, études diélectriques de quelques poly-vinylbenzylalkylcarbonates
Issa A. Katime, P. M. Sasia and B. Eguia	1159	Variation in thermodynamic properties of polymethacrylates in binary mixtures
S. Shaw and R. P. Singh	1163	A viscometric study of dilute solutions of mixtures of polystyrene and EPDM-based graft copolymers
I. Kraicheva, B. I. Liogonkii, R. Stefanova and G. Borisov	1167	Phosphorus-, nitrogen- and difuryl-containing monomers
R. M. Hassan, S. A. El-Shatoury, M. A. Mousa and A. Hassan	1173	Kinetics and mechanism of sol–gel transformation for polyelectrolytes of capillary copper alginate ionotropic membranes
A. M. Kochnev, F. T. Shageeva, V. P. Arkhireev and T. N. Kondratjeva	1177	The characteristics of stabilization of polyolefins by isocyanates
S. H. Kandil, A. A. Kamar, S. A. Shabaan, N. Taymour and S. E. Morsi	1181	Dimensional change in dental polymeric composite materials
Ryszard Mieczkowski	1185	The determination of the solubility parameter components of polystyrene by partial specific volume measurements
Maria Palaiologou, Fotini Viras and Kyriakos Viras	1191	Polymer cosolvent system: poly(vinyl-2-pyridine)/toluene/ethyl acetate
J. Grobelny, M. Sokół and E. Turska	1195	Investigation of structural changes in polyacrylonitrile (PAN) on swelling. ^{1}H broad-line n.m.r. study
Y. Shahab and L. Salim	1203	Steric arrangements of vicinal ester groups in copolymers of styrene with maleic anhydride and related comonomers
A. A. Caraculacu, N. C. Lungu and G. Caraculacu	1207	Aromatic polyamide with parabanic structure
G. Marchionni, G. Ajroldi and G. Pezzin	1211	Molecular weight dependence of some rheological and thermal properties of perfluoropolyethers